

Facilities Management Standards Transactional Standards Entity Class Definitions

Environmental Entity Set

1. Environment. Air, water, land, man-made structures, all organisms living therein, the interrelationships that exist among them, and archeological and cultural resources.

2. Environmental Security. The environmental security program enhances readiness by institutionalizing the Department of Defense's environmental, safety, and occupational health awareness, making it an integral part of the Department's daily activities. Environmental Security is comprised of restoration, compliance, conservation, pollution prevention, safety, occupational health, explosives safety, fire and emergency services, pest management, environmental security technology, and international activities.

(DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security)
[BCarpenter]

- **Environmental Compliance** – includes all activities and projects that utilize end-of-pipe treatment or disposal methods to meet applicable environmental requirements (DOD Instruction 4715.4 Pollution Prevention)

An end-of-pipe waste water discharge is waste water that is discharged, or released, out the end of a pipe directly into a body of water from an industrial facility or sewage treatment plant (classified as "Phase I"). (from GSA's Storm Water Pollution Prevention Fact Sheet – No date given) This definition can be generalized as "an end-of-pipe treatment is waste that is discharged or released directly out of the end of a pipe into an environmental media such as soil, water, air, or groundwater." [Ok Bbean]

Policies and activities required to meet the standards established by such environmental laws as Clean Air Act, Clean Water Act, and the Resource Conservation and Recovery Act. These laws are designed to protect human health and the environment. (Deputy Under Secretary of Defense, Installations and Environment (DUSD (I&E), Defense Environmental Network & Information Exchange (DENIX) website (<http://www.denix.osd.mil>), April 2003). [BCarpenter]

Compliance is meeting applicable statutory, Executive order, and regulatory standards for all environmental security functions, including FGS or the Overseas Environmental Baseline Guidance Document, as appropriate. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]

- **Restoration** - The term "environmental restoration" means actions taken consistent with a permanent remedy to prevent or minimize the release of hazardous substances into the environment so that such substances do not migrate to cause substantial danger to present or future public health or welfare or the environment. (10 USC 2701 found in "Notes" section) [Ok B Bean]

Studies, cleanup, and other actions taken to address contamination from past DoD activities to protect human health and the environment (DoD Instruction No. 4715.7, Apr. 1996, Subject: Environmental Restoration Program). [BCarpenter]

Restoration is identification, evaluation, containment, treatment, and/or removal of contamination so that it no longer poses a threat to public health and the environment. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]

- **Pollution Prevention** – means "source reduction," as defined in the Pollution Prevention Act (PPA), and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources; or protection of natural resources by conservation. (42 USC 11001 Notes) includes recycling (per FMS working group 4-02-03)
Source Reduction" means any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. "Source reduction" does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service. (42 USC 13102) [ok Bbean]

The purpose of pollution prevention is to reduce or eliminate pollution problems, rather than control them. The preventive approach attacks pollution at the source through conservation of resources, replacement of hazardous materials by less hazardous materials, waste reduction, and recycling (Deputy Under Secretary of Defense, Installations and Environment (DUSD (I&E), Defense Environmental Network & Information Exchange (DENIX) website (<http://www.denix.osd.mil>), April 2003). [BCarpenter]

Pollution prevention is source reduction as defined in 42 U.S.C. 13101-13109 (reference (nn)), and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources; or protection of natural resources by conservation. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]

- **Conservation** – The terms "conserving", "conservation", "manage", "managing", and "management", mean to sustain and, where appropriate, restore and enhance, healthy populations of fish, wildlife, and plants utilizing, in accordance with applicable Federal and State laws, methods and procedures associated with modern scientific

resource programs. Such methods and procedures include, consistent with the provisions of this Act, protection, research, census, law enforcement, habitat management, propagation, live trapping and transplantation, and regulated taking. (16 USC 668ee) If the 668ee is the source ? [ok Bbean]

The rest of this does not make sense ? what is wrong with the first definition why add the DOD instruction ? What is different in the DOD Instruction? [b bean]

Review cultural, archaeological, historical conservation definition in Title 16
Also

Conservation is the planned management, use, and protection of natural and cultural resources to provide sustainable use and continued benefit for present and future generations, and the prevention of exploitation, destruction, waste, and/or neglect. (DOD Instruction 4715.3 Environmental Conservation Program)

Sustained use of land, sea, and air space; protection of valuable natural and cultural resources for future generations; meeting all legal requirements; and promoting compatible multiple uses of those resources (Deputy Under Secretary of Defense, Installations and Environment (DUSD (I&E), Defense Environmental Network & Information Exchange (DENIX) website (<http://www.denix.osd.mil>), April 2003). [BCarpenter]

Conservation is planned management, use, and protection-, continued benefit for present and future generations; and prevention of exploitation, destruction, and/or neglect of natural and cultural resources. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]

- **Environmental Sampling** – The collection and analysis of samples from the environment to provide numerical data that describe a particular situation. (DOD 3150.8-M, December 1999) [Ok if this is the best we can find but we need a federal definition if we can find one. Bbean]

Activities, processes, and equipment involved in collecting and analyzing a representative part of a larger item for the purpose of determining, or showing, evidence of quality or composition (SDSFIE, Release 2.21) [BCarpenter].

Work Management Entity Set

- **Service** – useful labor that does not produce a tangible commodity (Merriam Webster collegiate on-line dictionary 4-01-03)
Various applications appear in the US Code as follows. These applications may require the development of additional entity classes.???
“management and professional support services” means services that provide engineering or technical support, assistance, advice, or training for the efficient and effective management and operation of organizations, activities, or systems. Those services include efforts that support or contribute to improved organization or program management, logistics management, project monitoring and reporting,

data collection, budgeting, accounting, auditing, and administrative or technical support for conferences and training programs. Also, “engineering and technical services” means services that take the form of advice, assistance, training, or hands-on training necessary to maintain and operate fielded weapon systems, equipment, and components (including software when applicable) at design or required levels of effectiveness. (31 USC 1105 and 10 USC 2212)

[What is wrong with the definition above ? Bbean]

Also, custodial services (determined by FMS working group meeting 4-02-03)

- **Construction** - preliminary planning, engineering, architectural, legal, fiscal, and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other similar actions necessary for the construction or alteration, as the case may be, of a public building (40 USC 612)
[I thought we had a problem with this one and it needed to be researched because it conflicted with the Service Definition above ??? Bbean]

Various applications appear in the US Code as follows. These applications may require the development of additional entity classes. [This is not a definition. Bbean]

Subclass “**Military construction**” includes any construction, development, conversion, or extension of any kind carried out with respect to a military installation. A military construction project includes all military construction work, or any contribution authorized by this chapter, necessary to produce a complete and usable facility or a complete and usable improvement to an existing facility (or to produce such portion of a complete and usable facility or improvement as is specifically authorized by law) (10 USC 2801), including military housing units and ancillary supporting facilities or the improvement or rehabilitation of existing units or ancillary supporting facilities (10 USC 2871)

[I thought you were going to do more research on the Construction area as the above is only one type or Sub Type of Construction. So you still have this task. Bbean]

- **Operations** – A military action or the carrying out of a strategic, operational, tactical, service, training, or administrative military mission. Also, the process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to gain the objectives of any battle or campaign. (Joint Publication 1-02 “Department of Defense Dictionary of Military and Associated Terms,” 9 January 2003).
Also include research, development, testing and evaluation (T&E), and range and training, (determined by FMS working group meeting 4-02-03 – definitions req’d)
Add’l subclasses need to be added for operational areas. [What does the last part mean ??? Bbean. I think we approved the first part for now but wanted more research on this area.]
- **Lease** – Includes any written agreement with respect to which the lessor and the debtor, as lessee, have expressed in the agreement or in a substantially

contemporaneous writing that the agreement is to be treated as a lease for Federal income tax purposes (11 USC 1110)

Various applications appear in the US Code as follows: These applications may require the development of additional entity classes.

The term "grazing permit and lease" means any document authorizing use of public lands or lands in National Forests in the eleven contiguous western States for the purpose of grazing domestic livestock (43 USC 1702)

The term "lease" means any form of authorization which is issued or maintained under 43 USC 1337 or 1335 and which authorizes exploration for, and development and production of, minerals; (43 USC 1331).

[I think this one needs a better look see and more work. Not every thing is Leased for Federal Tax purposes. So we need to do more research. Bbean]

- **Equipment** - In logistics, all nonexpendable items needed to outfit or equip an individual or organization (Joint Publication 1-02 "Department of Defense Dictionary of Military and Associated Terms," 9 January 2003).

Various applications appear in the US Code as follows. These applications may require the development of additional entity classes.

Equipment covered under the Energy Policy Act requirements – listing of electric motors and pumps, heating and cooling devices, water heaters, compressors, fans, blowers, refrigeration equipment etc. (42 USC 6311) **Look to see where these equipment types fit under assets, building etc**

I am pretty sure we agreed not to accept this version but wanted more work done on this with the Focus being on Equipment Installation versus just equipment. This is related to the Work Entity Set. So we need to continue on this one. Bbean]

Public Safety Entity Set

Safety is a multifaceted program designed to prevent accidental loss of human and material resources; and protects the environment from the potentially damaging effects of DoD mishaps.

(DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security)
[BCarpenter]

- **Environmental** – Relating to environment - the term "environment" means the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), and any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States. (42 USC 9601)
The term "environment" includes water, air, and land and the interrelationship, which exists among and between water, air, and land and all living things. (42 USC 11049)
Needs to be addressed in terms of operating environment (human factors environment) need to look at this versus Occupational Safety and Health: Is the

Public Safety Environmental entity class actually a subclass of Occupational Health and Safety?

Industrial Hygiene. That science and art devoted to the recognition, evaluation, and control of those environmental factors or stresses, arising in or from the workplace, which may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among workers. (DoD Instruction No. 6055.5, Jan. 10, 1989, subject: Industrial Hygiene and Occupational Health) [BCarpenter]

Health Hazard Education. Training shall be provided to personnel to ensure that they are aware of the health hazards associated with their occupation, informed of safe work practices, and educated in the use of appropriate personal protective equipment. Records of individual health hazard training must be maintained. (DoD Instruction No. 6055.5, Jan. 10, 1989, subject: Industrial Hygiene and Occupational Health) [BCarpenter]

It is DoD policy to provide each employee with a healthful work environment that is free from recognized chemical, physical, or biological hazards that cause or are likely to cause death or illness. To this end, health hazards must be identified, evaluated, and controlled. Consistent, meaningful occupational health and environmental surveillance programs must be implemented to ensure that controls adequately protect the health of DoD personnel. (DoD Instruction No. 6055.5, Jan. 10, 1989, subject: Industrial Hygiene and Occupational Health) [BCarpenter]

- **Emergency Response** - The terms "respond" or "response" means remove, removal, remedy, and remedial action; all such terms (including the terms "removal" and "remedial action") include enforcement activities related thereto. (CERCLA 42 USC 9601) **Address from public safety perspective as well. See Pax emergency response process map**
Emergency means any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States. (42 USC 5122) **check definition from public safety perspective**

It is DoD policy to:

1. Maintain an aggressive safety program under reference (b) to prevent accidents involving the transportation of DoD munitions and explosives, and to minimize the damaging effects of such accidents when they occur.
2. Respond as quickly as possible when alerted that a transportation accident involving DoD munitions or explosives requires DoD response to protect DoD interests or to safeguard the public. in such cases, action shall be taken promptly to prevent loss of life, injury, and property damage; to maintain security; and to minimize public inconvenience. Resolution of internal problems shall be a secondary priority. The Department of Defense will help first and solve institutional issues later. (DoD Directive No. 6055.134,

May 27, 1988, subject: Transportation Accident Prevention and Emergency Response Involving Conventional DoD Munitions and Explosives) [BCarpenter]

- **Explosives** – any chemical compound mixture, or device, the primary or common purpose of which is to function by explosion; the term includes, but is not limited to, dynamite and other high explosives, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters. (18 USC 841) [Ok for now Bbean]

Explosives Safety - Provides safety oversight and guidance to DoD for the development, testing, manufacture, maintenance, use, storage, transportation, disposal, research of ammunition and explosives, and treatment and cleanup of unexploded ordnance (UXO) to prevent endangerment of life and property inside and outside DoD installations worldwide. (Deputy Under Secretary of Defense, Installations and Environment (DUSD (I&E), Defense Environmental Network & Information Exchange (DENIX) website (<http://www.denix.osd.mil>), April 2003). [BCarpenter]

Explosives safety protects personnel, property, and military equipment from unnecessary exposure to the hazards associated with DoD ammunition and explosives; and protects the environment from the potentially damaging effects of DoD ammunition and explosives. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]

- **Force Protection** – Security program developed to protect Service members, civilian employees, family members, facilities and equipment, in all locations and situations, accomplished through the planned and integrated application of combating terrorism, physical security, operations security, personal protective services supported by intelligence, counterintelligence, and other security programs (Joint Publication 1-02 “Department of Defense Dictionary of Military and Associated Terms,” 9 January 2003). [ok for now but we need a Federal Definition So this one needs more research until we can say no law provides the definition. Bbean]

Force Protection – Measures designed to protect personnel, facilities, and equipment that support national defense missions. (Installation Force Protection Guide, December 8, 1997, Air Force Center for Environmental Excellence (AFCEE)) [BCarpenter]

- **Fire Protection** – The term "fire protection" includes personal services and equipment required for fire prevention, the protection of life and property from fire, and fire fighting; The term "fire organization" means any governmental entity or public or private corporation or association maintaining fire protection facilities within the United States, its Territories and possessions, and any governmental entity or public or private corporation or association which maintains fire protection

facilities in any foreign country in the vicinity of any installation of the United States (42 USC 1856) [ok Bbean]

Fire and emergency services enhance combat capability by preserving life and DoD property through fire suppression, fire prevention, fire protection engineering, and emergency responses. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]

- **Occupational Health** – The term "occupational safety and health standard" means a standard which requires conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment and places of employment. (29 USC 652)

[Again I think we asked that more research be done on this one as it relates to the Public Safety arena. Bbean]

Occupational health protects personnel from health risks, and includes occupational medicine, illness and injury trend analysis, epidemiology, occupational health nursing, industrial hygiene, and radiological health. (DoD Directive No. 4715.1, Feb. 24, 1996, Subject: Environmental Security) [BCarpenter]